

Luis Scalvi

List of Publications by Year in descending order

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98
papers

1,083
citations

394286

19
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102
all docs

102
docs citations

102
times ranked

941
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoluminescence of Eu ³⁺ ion in SnO ₂ obtained by sol-gel. Journal of Materials Science, 2008, 43, 345-349.	1.7	61
2	Optical characteristics of Er ³⁺ -Yb ³⁺ doped SnO ₂ xerogels. Journal of Alloys and Compounds, 2002, 344, 217-220.	2.8	54
3	Drude's model calculation rule on electrical transport in Sb-doped SnO ₂ thin films, deposited via sol-gel. Journal of Physics and Chemistry of Solids, 2006, 67, 1410-1415.	1.9	49
4	Sb doping effects and oxygen adsorption in SnO ₂ thin films deposited via sol-gel. Materials Research, 2003, 6, 451-456.	0.6	38
5	Electro-optical properties of Er-doped SnO ₂ thin films. Journal of the European Ceramic Society, 2004, 24, 1857-1860.	2.8	38
6	Poole-Frenkel effect in Er doped SnO ₂ thin films deposited by sol-gel-dip-coating. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 301-308.	0.8	31
7	EXAFS investigation on Sb incorporation effects to electrical transport in SnO ₂ thin films deposited by sol-gel. Journal of the European Ceramic Society, 2007, 27, 4265-4268.	2.8	31
8	Electron scattering and effects of sources of light on photoconductivity of SnO ₂ coatings prepared by sol-gel. Journal of Non-Crystalline Solids, 1999, 247, 171-175.	1.5	30
9	Rare earth centers properties and electron trapping in SnO ₂ thin films produced by sol-gel route. Journal of Non-Crystalline Solids, 2008, 354, 4840-4845.	1.5	30
10	Memristive behavior of the SnO ₂ /TiO ₂ interface deposited by sol-gel. Applied Surface Science, 2017, 410, 278-281.	3.1	29
11	Electron trapping of laser-induced carriers in Er-doped SnO ₂ thin films. Journal of the European Ceramic Society, 2007, 27, 3803-3806.	2.8	28
12	Transient decay of persistent photoconductivity in Al _{0.3} Ga _{0.7} As. Journal of Applied Physics, 1990, 68, 601-605.	1.1	23
13	Title is missing!. Journal of Sol-Gel Science and Technology, 1998, 13, 793-798.	1.1	23
14	Decay of photo-induced conductivity in Sb-doped SnO ₂ thin films, using monochromatic light of about bandgap energy. Applied Surface Science, 2013, 267, 164-168.	3.1	23
15	Preparation of TiO ₂ /SnO ₂ Thin Films by Sol-Gel Method and Periodic B3LYP Simulations. Journal of Physical Chemistry A, 2014, 118, 5857-5865.	1.1	23
16	Schottky emission in nanoscopically crystallized Ce-doped SnO ₂ thin films deposited by sol-gel-dip-coating. Thin Solid Films, 2008, 517, 976-981.	0.8	22
17	Nanoparticle characterization of Er-doped SnO ₂ pellets obtained with different pH of colloidal suspension. Journal of Applied Physics, 2013, 114, .	1.1	22
18	Deposition and characterization of BiVO ₄ thin films and evaluation as photoanodes for methylene blue degradation. Journal of Solid State Electrochemistry, 2012, 16, 3267-3274.	1.2	20

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19	Annealing temperature influence on sol-gel processed zirconium oxide thin films for electronic applications. <i>Ceramics International</i> , 2018, 44, 10790-10796.	2.3	20
20	Evaluation of bulk and surfaces absorption edge energy of sol-gel-dip-coating SnO ₂ thin films. <i>Materials Research</i> , 2010, 13, 437-443.	0.6	19
21	Decay of photo-excited conductivity of Er-doped SnO ₂ thin films. <i>Journal of Materials Science</i> , 2007, 42, 2216-2221.	1.7	18
22	Photoelectrochemical properties of FTO/m-BiVO ₄ electrode in different electrolytes solutions under visible light irradiation. <i>Ionics</i> , 2014, 20, 105-113.	1.2	18
23	Effect of pH of colloidal suspension on crystallization and activation energy of deep levels in SnO ₂ thin films obtained via sol-gel. <i>Journal of Physics and Chemistry of Solids</i> , 2009, 70, 1312-1316.	1.9	17
24	Dip-coating deposition of BiVO ₄ /NiO p-n heterojunction thin film and efficiency for methylene blue degradation. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 7705-7714.	1.1	17
25	Deposition of Al ₂ O ₃ by resistive evaporation and thermal oxidation of Al to be applied as a transparent FET insulating layer. <i>Ceramics International</i> , 2014, 40, 3785-3791.	2.3	16
26	Interface Formation and Electrical Transport in SnO ₂ :Eu ³⁺ /GaAs Heterojunction Deposited by Sol-gel Dip-Coating and Resistive Evaporation. <i>Journal of Electronic Materials</i> , 2010, 39, 1170-1176.	1.0	15
27	Structural Characterization of Nanocrystalline Sb-Doped SnO ₂ Xerogels by Multiedge X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 19206-19213.	1.5	15
28	Interface formation of nanostructured heterojunction SnO ₂ :Eu/GaAs and electronic transport properties. <i>Applied Surface Science</i> , 2013, 267, 200-205.	3.1	15
29	Ultraviolet excitation of photoconductivity in thin films of sol-gel SnO ₂ . <i>Journal of the European Ceramic Society</i> , 2005, 25, 2825-2828.	2.8	14
30	Numerical simulation of the liquid phase in SnO ₂ thin film deposition by sol-gel-dip-coating. <i>Journal of Sol-Gel Science and Technology</i> , 2010, 55, 385-393.	1.1	14
31	Growth of Al ₂ O ₃ thin film by oxidation of resistively evaporated Al on top of SnO ₂ , and electrical properties of the heterojunction SnO ₂ /Al ₂ O ₃ . <i>Journal of Materials Science</i> , 2011, 46, 6627-6632.	1.7	13
32	Annealing effects on optical properties of natural alexandrite. <i>Journal of Physics Condensed Matter</i> , 2003, 15, 7437-7443.	0.7	12
33	Influence of pH of colloidal suspension on the electrical conductivity of SnO ₂ thin films deposited via Sol-Gel-Dip-Coating. <i>Materials Research</i> , 2011, 14, 113-117.	0.6	12
34	Transient decay of photoinduced current in semiconductors and heterostructures. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 033001.	1.3	12
35	Improved electrical transport in lightly Er-doped sol-gel spin-coating SnO ₂ thin films, processed by photolithography. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 118, 1419-1427.	1.1	11
36	Emission Properties Related to Distinct Phases of Sol-Gel Dip-Coating Titanium Dioxide, and Carrier Photo-Excitation in Different Energy Ranges. <i>Materials Research</i> , 2017, 20, 866-873.	0.6	11

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37	Generation and Propagation of Superhigh-Frequency Bulk Acoustic Waves in GaAs. Physical Review Applied, 2019, 12, .	1.5	11
38	Cr ³⁺ Distribution in Al ¹ and Al ² Sites of Alexandrite (BeAl ₂ O ₄ : Cr ³⁺) Induced by Annealing, Investigated by Optical Spectroscopy. Energy and Power Engineering, 2010, 02, 18-24.	0.5	11
39	Heterojunction between Al ₂ O ₃ and SnO ₂ thin films for application in transparent FET. Materials Research, 2014, 17, 1420-1426.	0.6	10
40	Visible emission from Er-doped SnO ₂ thin films deposited by sol-gel. Ceramica, 2007, 53, 187-191.	0.3	9
41	Raman and photoluminescence of Er ³⁺ -doped SnO ₂ obtained via the sol-gel technique from solutions with distinct pH. Optical Materials, 2010, 33, 66-70.	1.7	9
42	Er rare-earth ion incorporation in sol-gel SnO ₂ . Materials Research, 2003, 6, 445-449.	0.6	8
43	Analysis of Er ³⁺ incorporation in SnO ₂ by optical investigation. Brazilian Journal of Physics, 2006, 36, 270-273.	0.7	8
44	Optical emission and electron capture of rare-earth trivalent ions located at distinct sites in thin films. Physics Procedia, 2009, 2, 353-364.	1.2	8
45	On the photo-induced electrical conduction related to gas sensing of the Sb:SnO ₂ /TiO ₂ heterostructure. Sensors and Actuators A: Physical, 2018, 281, 250-257.	2.0	8
46	Influence of thermal annealing on the properties of evaporated Er-doped SnO ₂ . Materials Research Bulletin, 2019, 120, 110585.	2.7	8
47	Thermal annealing-induced electric dipole relaxation in natural alexandrite. Physics and Chemistry of Minerals, 2005, 31, 733-737.	0.3	7
48	Luminescence of Eu ³⁺ in the thin film heterojunction GaAs/SnO ₂ . Optical Materials Express, 2015, 5, 59.	1.6	7
49	On the electrical properties of distinct Eu ³⁺ emission centers in the heterojunction GaAs/SnO ₂ . Thin Solid Films, 2016, 612, 303-309.	0.8	7
50	Deposition of TiO ₂ thin Films by Dip-Coating Technique from a Two-Phase Solution Method and Application to Photocatalysis. Materials Research, 2021, 24, .	0.6	7
51	Effects of Solution History on Sol-Gel Processed Tin Oxide Thin Film Transistors. Journal of the American Ceramic Society, 2016, 99, 4000-4006.	1.9	6
52	Ambipolar transport in tin dioxide thin film transistors promoted by PCBM fullerene. Journal of Materials Science: Materials in Electronics, 2018, 29, 20010-20016.	1.1	6
53	Influence of Pb ²⁺ doping in the optical and electro-optical properties of SnO ₂ thin films. Materials Chemistry and Physics, 2022, 278, 125571.	2.0	6
54	Deposition and photo-induced electrical resistivity of dip-coated NiO thin films from a precipitation process. Journal of Materials Science: Materials in Electronics, 2013, 24, 1823-1831.	1.1	5

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55	Electron trapping in the photo-induced conductivity decay in GaAs/SnO ₂ heterostructure. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	5
56	X-ray absorption spectroscopy and Eu ³⁺ -emission characteristics in GaAs/SnO ₂ heterostructure. SN Applied Sciences, 2020, 2, 1.	1.5	5
57	Light-induced relaxing dipoles in n-type Al _x Ga _{1-x} As. Physical Review B, 1995, 51, 13864-13867.	1.1	4
58	Photodesorption and electron trapping in n-type SnO ₂ thin films grown by dip-coating technique. Radiation Effects and Defects in Solids, 1998, 146, 199-206.	0.4	4
59	Light-induced electric dipole relaxation in synthetic and natural alexandrite. Radiation Effects and Defects in Solids, 2001, 156, 295-299.	0.4	4
60	Planar Waveguides Based on Nanocrystalline and Er ³⁺ Doped SnO ₂ . Journal of Metastable and Nanocrystalline Materials, 2002, 14, 107-110.	0.1	4
61	A continuously differentiable upwinding scheme for the simulation of fluid flow problems. Applied Mathematics and Computation, 2012, 218, 8614-8633.	1.4	4
62	Photoelectrochemical properties of FTO/p-NiO electrode induced by UV light irradiation. Ionics, 2015, 21, 1407-1415.	1.2	4
63	Dip-coating deposition of resistive BiVO ₄ thin film and evaluation of their photoelectrochemical parameters under distinct sources illumination. Journal of Solid State Electrochemistry, 2016, 20, 1527-1538.	1.2	4
64	Investigation of sensing properties of sol-gel processed 4 at.% Sb:SnO ₂ /TiO ₂ thin films. Journal of Materials Science: Materials in Electronics, 2018, 29, 467-473.	1.1	4
65	Thermal Annealing Influence on the Properties of Heterostructure Based on 2 at.% Eu Doped SnO ₂ and Cu _{1.8} S. Journal of Electronic Materials, 2018, 47, 7463-7471.	1.0	4
66	Enhancement of surface properties of sol gel tin dioxide thin films with addition of surfactant in the precursor solution. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	4
67	Dipole relaxation current in n-type Al _x Ga _{1-x} As. Applied Physics Letters, 1993, 63, 2658-2660.	1.5	3
68	Oxygen related defects excitation and photoconductivity dependence of SnO ₂ Sol-Gel films with several light sources. Radiation Effects and Defects in Solids, 1999, 150, 391-395.	0.4	3
69	Characterization of metallic electrical contacts to SnO ₂ thin films lightly doped with Eu ³⁺ ions, and photo-induced resistivity. Materials Chemistry and Physics, 2012, 134, 994-1000.	2.0	3
70	Photo-Induced conductivity of heterojunction GaAs/Rare-Earth doped SnO ₂ . Materials Research, 2013, 16, 831-838.	0.6	3
71	Interface conduction and photo-induced electrical transport in the heterojunction formed by GaAs and Ce ³⁺ -doped SnO ₂ . Journal of Materials Science: Materials in Electronics, 2017, 28, 5415-5424.	1.1	3
72	Photoluminescence of Rare-Earth Ions in the Nanocrystalline GaAs/SnO ₂ Heterostructure and the Photoinduced Electrical Properties Related to the Interface. Condensed Matter, 2017, 2, 9.	0.8	3

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73	Low-temperature ZrO ₂ thin films obtained by polymeric route for electronic applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 16065-16072.	1.1	3
74	Photo-induced electron trapping in indirect bandgap at low temperature. Journal of Physics Condensed Matter, 1999, 11, 425-433.	0.7	2
75	Photoconductivity excitation spectrum for stretch-oriented PPV. Synthetic Metals, 2005, 154, 77-80.	2.1	2
76	Photo-induced dipole relaxation current in natural Amethyst. Materials Research, 2012, 15, 461-466.	0.6	2
77	Anomalous diode behavior of Cu ₂ S/SnO ₂ p-n junction. Journal of Materials Science: Materials in Electronics, 2021, 32, 21804-21812.	1.1	2
78	Deposition of hybrid structures of reduced graphene oxide and tin dioxide thin films, and persistent photoconductivity observation. Current Applied Physics, 2022, 41, 49-58.	1.1	2
79	Zirconium oxide film deposition properties to build transparent electronic devices in conjunction with tin dioxide. International Journal of Modern Physics B, 2022, 36, .	1.0	2
80	Substitutional donor related states and Au/Ge/Ni contacts to Al _x Ga _{1-x} As. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 68, 727-735.	0.6	1
81	Dipole Relaxation Current in N-Type Al _x Ga _{1-x} As. Materials Research Society Symposia Proceedings, 1993, 325, 285.	0.1	1
82	Investigation of temperature influence on photo-induced conductivity in n-type Al _x Ga _{1-x} As. Radiation Effects and Defects in Solids, 1998, 146, 175-186.	0.4	1
83	Contribution of oxygen related defects to the electronic transport in SnO ₂ sol-gel films. Radiation Effects and Defects in Solids, 2001, 156, 145-149.	0.4	1
84	Planar Waveguides Based on Nanocrystalline and Er ³⁺ /Doped SnO ₂ . Materials Science Forum, 2002, 403, 107-110.	0.3	1
85	Determinação de diagramas de bandas de energia e da borda de absorção em SnO ₂ , depositado via sol-gel, sobre quartzo. Cerâmica, 2009, 55, 88-93.	0.3	1
86	Al ₂ O ₃ Obtained through Resistive Evaporation for Use as Insulating Layer in Transparent Field Effect Transistor. Advanced Materials Research, 2014, 975, 248-253.	0.3	1
87	Influence of substrate temperature on the deposition of the homostructure SnO ₂ :Sb/SnO ₂ :Er via sol-gel dip-coating. Ferroelectrics, 2019, 545, 10-21.	0.3	1
88	A dynamic time-temperature-dependent process for thermal oxidation of Sn leading to SnO _x thin films: Impedance spectroscopy study. International Journal of Modern Physics B, 2020, 34, 2050184.	1.0	1
89	Anatase-Rutile Transition and Photo-Induced Conductivity of Highly Yb-Doped TiO ₂ Films Deposited by Acid Sol-Gel Dip-Coating Method. Journal of Electronic Materials, 2020, 49, 6369-6379.	1.0	1
90	Synthesis and Characterization of Cu _{2-x} S structures by Different Chemical Routes for Electronic Applications. Materials Research, 2021, 24, .	0.6	1

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91	Subband mixing inducing negative resistance. Solid State Communications, 1993, 86, 301-304.	0.9	0
92	Powder Diffraction of Components Subject to Corrosion in Fuse Cutouts with Ceramic Insulation. Materials Science Forum, 2008, 591-593, 548-553.	0.3	0
93	Optical excitation of charge carriers from intra-bandgap states in Ce-doped SnO ₂ thin films. AIP Conference Proceedings, 2008, , .	0.3	0
94	A Theoretical Analysis of Sb ⁵⁺ Incorporation in Highly Doped SnO ₂ Matrix. Current Physical Chemistry, 2014, 4, 15-20.	0.1	0
95	Nanostructured TiO ₂ -Based Composites for Light Absorption. Advanced Materials Research, 0, 975, 207-212.	0.3	0
96	Investigation of Photoinduced Electrical Properties in the Heterojunction TiO ₂ /SnO ₂ . Advanced Materials Research, 0, 975, 201-206.	0.3	0
97	Photo-induced electrical behavior under gas adsorption on SnO ₂ -based heterostructures. Materials Chemistry and Physics, 2020, 255, 123510.	2.0	0
98	Resistividade do filme depositado via sol-gel e estado de oxidação do dopante Ce na matriz SnO ₂ . Ceramica, 2011, 57, 225-230.	0.3	0